Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) An integrated circuit fabrication process, the process comprising:

exposing a photoresist material provided including arylalkoxysilane over a substrate to a first radiation at a first lithographic wavelength;

selectively transforming a top portion of the material in accordance with a pattern provided on a mask or reticle; and

exposing the photoresist material to a second radiation at a second lithographic wavelength,

wherein the first lithographic wavelength is shorter than the second lithographic wavelength and the transformed top portion of the photoresist material being non-transparent to the second radiation.

2. (Original) The process of claim 1, wherein the first lithographic wavelength is selected from a wavelength including 157 nm, 126 nm, and 13.4 nm.

3. (Original) The process of claim 1, wherein the second lithographic wavelength is selected from a wavelength including 365 nm, 248 nm, and 193 nm.

4. (Original) The process of claim 1, wherein the exposing step with the first radiation is performed before the exposing step with the second radiation.

5. (Original) The process of claim 1, further comprising providing the transformed top portion of the photoresist material as a self-aligned mask for the exposing step with the second radiation.

6. (Original) The process of claim 1, wherein the photoresist material is a positive photoresist material.

7. (Original) The process of claim 1, wherein the transformed top portion of the photoresist material comprises polymerized organoarylalkoxysilane material.

8. (Original) The process of claim 7, wherein the thickness of the transformed top portion is at least 10 nm.

9. (Original) The process of claim 1, further comprising transferring the pattern of the mask or reticle onto the photoresist material, wherein a resolution of the transferred pattern is determined by the first lithographic wavelength.

10-17 (Cancelled).

18. (Currently Amended) A method of extending the use of 248 nm and 193 nm photoresists to lithographic regimes less than approximately 157 nm in an integrated circuit, the method comprising:

providing a first radiation at a short lithographic wavelength; ~~and~~

transforming a top portion of a photoresist layer provided over a substrate in accordance with a pattern on a mask or reticle, wherein the transformed top portion on top of the photoresist layer includes at least one polymerized area where the first radiation is incident thereon and comprises the pattern from the mask or reticle; and

providing a second radiation at a long lithographic wavelength after providing a first radiation, wherein the short lithographic wavelength is smaller than the long lithographic wavelength.

19. (Currently Amended) The method of claim 18, ~~further comprising providing a second radiation at a long lithographic wavelength after providing a first radiation, wherein the short lithographic wavelength is smaller than the long lithographic wavelength~~ wherein the photoresist includes an arylalkoxysilane.

20. (Original) The method of claim 19, wherein the mask or reticle is omitted at a second radiation step.

21. (Original) The method of claim 19, wherein the second radiation is not transmitted through the polymerized area.

22. (Original) The method of claim 21, further comprising patterning the photoresist layer in accordance with each of a plurality of polymerized areas on top of the photoresist layer and the second radiation, wherein the resolution of the patterned photoresist layer is determined by the short lithographic wavelength of the first radiation.

23. (New) An integrated circuit fabrication process, the process comprising:

exposing a photoresist material provided over a substrate to a first radiation;

selectively transforming a top portion of the material in accordance with a pattern provided on a mask or reticle; and

exposing the photoresist material to a second radiation,

wherein the first radiation has a shorter wavelength than the second radiation.

24. (New) The process of claim 23, wherein the first radiation is selected from a radiation wavelength including 157 nm, 126 nm, and 13.4 nm.

25. (New) The process of claim 23, wherein the second radiation is selected from a radiation wavelength including 365 nm, 248 nm, and 193 nm.

26. (New) The process of claim 23, wherein the exposing step with the first radiation is performed before the exposing step with the second radiation.

27. (New) The process of claim 23, wherein the transformed top portion of the photoresist material is non-transparent to the second wavelength radiation.

28. (New) The process of claim 23, wherein the photoresist material includes an arylalkoxysilane monomer with a photobase generator and a catalytic amount of water.

29. (New) The process of claim 23, wherein the transformed top portion of the photoresist material comprises polymerized organoarylalkoxysilane material.

30. (New) The process of claim 29, wherein the thickness of the transformed top portion is at least 10 nm.